



COMMONWEALTH of VIRGINIA

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Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: Custom Wood Products, LLC
Facility Name: Custom Wood Products, LLC – Aerial Way Plant
Facility Location: 3304 Aerial Way, Roanoke, Virginia
Registration Number: 21390
Permit Number: BRRO-21390

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Pages 6 through 38)

December 10, 2013
Effective Date

December 9, 2018
Expiration Date

Regional Director
December 10, 2013
Signature Date

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Facility Information

Permittee

Custom Wood Products, LLC
3304 Aerial Way Drive
Roanoke, VA 24018

Responsible Official

Robert Moore
Co-President, CEO & CFO

Facility

Custom Wood Products, LLC – Aerial Way Plant
3304 Aerial Way Drive
Roanoke, VA 24018

Contact Persons

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County-Plant Identification Number: 51-770-00254

Facility Description: NAICS 337110 – Custom Wood Products, LLC (CWP) owns and operates a wood cabinet manufacturing and coating facility at 3304 Aerial Way Drive in Roanoke, Virginia. CWP produces only custom cabinets that are designed to meet customer specifications.

The Aerial Way plant currently operates with an annual production rate of approximately 27,000 cabinets per year, while working a single 8-hour shift, with the potential to increase production to 81,000 cabinets per year, while working three 8-hour shifts per day. The plant receives pre-cut boarding and stores these wood pieces on-site for custom processing. Select pieces are then cut, shaped and assembled to meet customer specifications in the building, door, and/or framing woodworking departments. Each piece of woodworking equipment is either vented to an indoor dust collector or vented to the Aerial Way plant's main baghouse to control wood dust emissions. Once the various cabinet components have been cut, shaped and assembled to specifications, they are sent to the coating booths to apply tints, stains, basecoats, and/or topcoats. Coatings are applied using a combination of high volume low-pressure (HVLP) spray guns that operate at air pressures below 10 psi and air-assisted airless spray guns. The Aerial Way plant has eleven coating booths with each containing dry filters that collect particulate matter emissions generated from the coating overspray.

In addition to particulate matter emissions from coating operations, the Aerial Way Plant emits volatile organic compound (VOC) and Hazardous Air Pollutant (HAP) emissions, for which the

plant is considered a major source. Individual HAPs include Toluene, Xylene, Methyl Isobutyl Ketone (MIBK), Methanol, Ethyl benzene, Glycol Ethers, Formaldehyde, Naphthalene, Dimethyl Phthalate, and Hexane.

The Maximum Achievable Control Technology (MACT) standard for wood furniture plants (40 CFR 63 Subpart JJ) applies to the finishing operations portion of the facility as an existing source before the December 7, 1995 MACT applicability date. The plant's primary method for meeting the federal standard is to maintain an average coating ratio of HAPS/solids of less than 1.0 lb VHAP/lb solids. This facility is not a PSD definition major source due to VOC PTE emissions remaining below 250 tons/yr. It is located in an Early Action Compact Area for Ozone and emissions control area for VOC and NOx. The location is regarded as in attainment for other criteria pollutants.

Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Woodworking Equipment							
ES-DD	SNBH1	Woodworking – Door Department	120 cabinets/shift+	Baghouse	CDBH1	PM & PM-10	-
ES-FD	SNBH1	Woodworking – Framing Department	120 cabinets/shift+	Baghouse	CDBH1	PM & PM-10	-
ES-BD	SNBH1	Woodworking – Building Department	120 cabinets/shift+	Baghouse	CDBH1	PM & PM-10	-
Finishing Line Equipment (MACT JJ subject)							
ES220A	SN220A	Devilbiss 7'8"x12' Wipe/Stain Booth	660 ft ² /hr	Dry filter	CD220A	PM & PM-10	08/25/2011
ES225	SN225	Greenline 7'6"x 20' Topcoat/Basecoat Booth	660 ft ² /hr	Dry filter	CD225	PM & PM-10	08/25/2011
ES227	SN227	Devilbiss 7'6"x12' Topcoat Booth	660 ft ² /hr	Dry filter	CD227	PM & PM-10	08/25/2011
ES228	SN228	Devilbiss 7'6"x12' Topcoat Booth	660 ft ² /hr	Dry filter	CD228	PM & PM-10	08/25/2011
ES229	SN229	Devilbiss 7'6"x12' Topcoat Booth	660 ft ² /hr	Dry filter	CD229	PM & PM-10	08/25/2011
ES230	SN230	Devilbiss 7'6"x14' Topcoat/Basecoat Booth	660 ft ² /hr	Dry filter	CD230	PM & PM-10	08/25/2011
ES231	SN231	Devilbiss 7'6"x14' Topcoat/Basecoat Booth	660 ft ² /hr	Dry filter	CD231	PM & PM-10	08/25/2011
ES233	SN233	Custom Built 7'6"x14' Topcoat/Basecoat Booth	660 ft ² /hr	Dry filter	CD233	PM & PM-10	08/25/2011
ES234	SN234	Superfici Flat Line Booth	1,200 ft ² /hr	Dry filter	CD234	PM & PM-10	08/25/2011
ES235	SN235	Production System 8' x 12' Toning/Staining Booth	660 ft ² /hr	Dry filter	CD235	PM & PM-10	08/25/2011
ES236	SN236	Spray System 10' x 14' Toning/Staining Booth	660 ft ² /hr	Dry filter	CD236	PM & PM-10	08/25/2011

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

+ Shift typically is 8 hours in duration.

Process Equipment Requirements - Woodworking

Unit ID# ES-DD Door Department
Unit ID# ES-FD Framing Department
Unit ID# ES-BD Building Department

Limitations

1. **Woodworking – Limitations** - No owner or other person shall cause or permit to be discharged any particulate emissions caused by any woodworking operation without providing, as a minimum, for their collection, adequate duct work and properly designed collectors, or other such devices, as approved by the Board.
(9 VAC 5-40-2270 A and 9 VAC 5-80-110)
2. **Woodworking - Limitations** - Particulate emissions from each wood dust control device exhaust shall not exceed the limits specified below:

Total Particulate	0.05 gr/dscf
PM-10	0.05 gr/dscf

(9 VAC 5-40-2270 B, 9 VAC 5-50-10 D and 9 VAC 5-80-110)
3. **Woodworking – Visible Emission Limitations** – No owner or other person shall cause or permit to be discharged into the atmosphere from any wood dust emission point any visible emissions which exhibit greater than twenty percent (20%) opacity, except for one six-minute period in any one hour of not more than thirty percent (30%) opacity.
(9 VAC 5-50-80 and 9 VAC 5-80-110)
4. **Woodworking - Operation & Maintenance Procedures** – The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to the Aerial Way baghouse (CDBH1) and process equipment which affect such emissions:
 - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
 - b. Develop an inspection schedule, monthly at a minimum, to insure the operational integrity of the fabric filters and maintain records of inspection results.
 - c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
 - d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records

of the training provided including the names of trainees, the date of training and the nature of the training.

- e. Maintain an inventory of spare parts that are needed to maintain the control device(s) in proper working order to minimize emissions.

Records of maintenance, inspections and training shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request.
 (9 VAC 5-40-20E and 9 VAC 5-80-110)

Compliance Assurance Monitoring (CAM)

- 5. **Woodworking Equipment Conditions (CDBH1) - CAM** – The permittee shall implement a Compliance Assurance Monitoring (CAM) Plan to monitor the fabric filter controlling particulate from the woodworking operation in accordance with the following table. Each monitor shall be approved, and in compliance with 40 CFR 64.3(b) or (d).

Indicator 1	
Indicator	Visible Emissions
Measurement Approach	Observation of the fabric filter to determine the presence or absence of visible emissions from the exhaust or structure. If the presence of visible emissions is observed the source will take timely action such that the unit resumes operation with no visible emissions.
Indicator Range	An excursion is defined as any observed visible emissions.
Performance Criteria	
Data Representativeness	Measurements are made at the emission point.
Verification of Operational Status	Not applicable.
QA/QC Practices and Criteria	Staff will be trained in EPA Method 22 procedures.
Monitoring Frequency	Daily. Daily observation is not required if the unit does not operate during that day.
Data Collection Procedures	All daily observations (or notation that the fabric filter did not operate on a given date) will be recorded in a logbook at the facility. All excursions will be documented and reported. Copies of all EPA Method 9 evaluations (if applicable) will be maintained at the facility.
Averaging Period	Not applicable

Changes pertaining to the information in this condition shall not be implemented prior to approval by the DEQ. Changes may require public participation according to the requirements of 9 VAC 5-80-230.

(9 VAC 5-80-110 E and 40 CFR 64.6(c))

6. **Woodworking Equipment Conditions (CDBH1) - CAM** – The permittee shall conduct monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9. (9 VAC 5-80-110 E and 40 CFR 64.6(c))
7. **Woodworking Equipment Conditions (CDBH1) - CAM** – Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the fabric filters are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data available requirement, if applicable. The permittee shall use all of the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions. (9 VAC 5-80-110 E and 40 CFR 64.7(c))
8. **Woodworking Equipment Conditions (CDBH1) - CAM** - Upon detecting an excursion or exceedance, the permittee shall restore operation of the fabric filter to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable. (9 VAC 5-80-110 E and 40 CFR 64.7 (d)(1))
9. **Woodworking Equipment Conditions (CDBH1) - CAM** - Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process. (9 VAC 5-80-110 E and 40 CFR 64.7(d)(2))
10. **Woodworking Equipment Conditions (CDBH1) - CAM** - If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need

to modify the existing indicator ranges or designated conditions, the permittee shall promptly (in accordance with Condition 51) notify the Director, Blue Ridge Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. (9 VAC 5-80-110 E and 40 CFR 64.7(e))

11. **Woodworking Equipment Conditions (CDBH1) - CAM** - If the number of visible emission excursions documented for the fabric filter exceeds five (5) excursions for any consecutive one hundred eighty (180) observations, or as otherwise required by the DEQ in accordance with review conducted under 40 CFR 64.7(d)(2), the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. (9 VAC 5-80-110 E and 40 CFR 64.8(a) and (b))
12. **Woodworking Equipment Conditions (CDBH1) - CAM** - Monitoring imposed under 40 CFR Part 64 shall not excuse the permittee from complying with any existing requirements under federal, state, local law, or any other applicable requirement under the Act, as described in 40 CFR 64.10. (9 VAC 5-80-110 E and 40 CFR 64.10)
13. **Woodworking Equipment Conditions (CDBH1) - CAM - Recordkeeping** - The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan (QIP) required pursuant to §64.8 and any activities undertaken to implement a quality improvement plan (QIP), and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). (9 VAC 5-80-110 E and 40 CFR 64.9(b))
14. **Woodworking Equipment Conditions (CDBH1) - CAM – Reporting** - The permittee shall submit CAM reports as part of the Title V semi-annual monitoring reports required by General Condition 48 of this permit to the Director, Blue Ridge Regional Office. Such reports shall include at a minimum:
 - a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

- c. A description of the actions taken to implement a quality improvement plan (QIP) during the reporting period as specified in §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

(9 VAC 5-80-110 F and 40 CFR 64.9(a))

Recordkeeping

15. **Woodworking - On Site Records** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:
 - a. Records of scheduled and unscheduled maintenance to the baghouse (CDBH1) and process equipment affecting baghouse emissions.
 - b. Records of baghouse (CDBH1) inspections.
 - c. Copies of operating procedures for woodworking equipment and the baghouse fabric filter (CDBH1) and records of operator training.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-40-50 and 9 VAC 5-80-110)

Process Equipment Requirements – Finishing

Unit ID # ES220A	Devilbiss 7' 8" x 12' Wipe/Stain Booth
Unit ID # ES225	Greenline 7' 6" x 20' Topcoat/Basecoat Booth
Unit ID # ES227	Devilbiss 7' 6" x 12' Topcoat Booth
Unit ID # ES228	Devilbiss 7' 6" x 12' Topcoat Booth
Unit ID # ES229	Devilbiss 7' 6" x 12' Topcoat Booth
Unit ID # ES230	Devilbiss 7' 6" x 12' Topcoat/Basecoat Booth
Unit ID # ES231	Devilbiss 7' 6" x 12' Topcoat/Basecoat Booth
Unit ID # ES233	Custom Built 7' 6" x 14' Topcoat/Basecoat Booth
Unit ID # ES234	Superfici Flat Line Booth
Unit ID # ES235	Production System 8' x 12' Toning/Staining Booth
Unit ID # ES236	Spray System 10' x 14' Toning/Staining Booth

Limitations

16. **Finishing - Emission Controls** - Particulate emissions (PM & PM-10) emissions from all coating booths shall be controlled by dry filters. The dry filters shall be provided with

adequate access for inspection and shall be in operation when the coating booths are operating.

(9 VAC 5-80-110 and Condition 2 of 8/25/2011 Permit)

17. **Finishing - Control Efficiency** - The dry filters shall maintain a control efficiency for PM and PM-10 of no less than 95 percent, to be determined by vendor information, or other DEQ approved method.

(9 VAC 5-80-110 and Condition 3 of 8/25/2011 Permit)

18. **Finishing - VOC Work Practice Standards** - At all times the disposal of volatile organic compounds shall be accomplished by taking measures, to the extent practicable, consistent with air pollution control practices for minimizing emissions. Volatile organic compounds shall not be intentionally spilled, discarded in sewers which are not connected to a treatment plant, or stored in open containers, or handled in any other manner that would result in evaporation beyond that consistent with air pollution practices for minimizing emissions.

(9 VAC 5-80-110 and Condition 4 of 8/25/2011 Permit)

19. **Finishing - Emission Limits** - Combined emissions from the operation of the coating booths shall not exceed the limits specified below:

Particulate Matter (PM)	7.7 tons/yr
PM-10	7.7 tons/yr
Volatile Organic Compounds	218.7 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of the emission limits. Compliance with these emission limits may be determined as stated in Conditions 16, 17, and 24.

(9 VAC 5-80-110 and Condition 7 of 8/25/2011 Permit)

20. **Finishing - Visible Emission Limits** - Visible emissions from the coating booths shall not exceed five percent (5%) opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).

(9 VAC 5-80-110 and Condition 8 of 8/25/2011 Permit)

21. **Finishing - Maintenance/Operating Procedures** – At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practical, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance;
- b. Maintain an inventory of spare parts;
- c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum;
- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance, inspections and training shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request.
(9 VAC 5-80-110 and Condition 13 of 8/25/2011 Permit)

Monitoring

22. **Finishing - Control Device Observation** - To ensure good performance, the coating booth dry filters shall be observed for the functional integrity (i.e. filters in place with no visible holes, tears, gaps, etc.) by the permittee with a frequency of not less than once per week, that the coating booth operates. The permittee shall keep a log of the observations, maintenance, and replacement of the dry filters.
(9 VAC 5-80-110 and Condition 5 of 8/25/2011 Permit)
23. **Finishing - Visible Emissions Monitoring** - At least once each calendar day that the coating booths operate, an observation of the presence of visible emissions from each coating booth stack shall be made. The presence of visible emissions shall require the permittee to:
 - a. Take timely correction action such that the unit resumes operation with no visible emissions, or,
 - b. Conduct a visible emission evaluation (VEE), in accordance with EPA Method 9 (reference 40 CFR 60 Appendix A) for a minimum of six minutes, to assure visible emissions from the affected unit are 5 percent opacity or less. If any of the 15-second observations exceeds 5 percent opacity, the observation period shall continue for a total of sixty (60) minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the equipment resumes operation with visible emissions less than or equal to 5 percent opacity.

The permittee shall maintain an observation log to demonstrate compliance. The logs shall include the date and time of the observations, whether or not there were visible emissions

the results of all VEEs, any necessary corrective action, and the name of the observer. If a unit has not been operated for the entire week, it shall be noted in the log book.
(9 VAC 5-80-110 E)

Recordkeeping

24. **Finishing - On Site Records** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:
- a. Annual throughput of finishing materials, coatings, thinners, and cleaning solvents (in gallons), calculated monthly as the sum of each consecutive 12-month period.
 - b. Control efficiency vendor information, or other DEQ approved method, of the coating booth dry filters.
 - c. Material Safety Data Sheets (MSDS), Certified Product Data Sheets (CPDS) or other vendor information as approved by DEQ showing VOC content, toxic compound content, HAP content, water content, and solids content for each finishing material, coating, thinner, and cleaning solvent used.
 - d. Monthly and annual emissions calculations for PM and PM-10 from the coating booths using calculation methods approved by the DEQ. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. The consecutive 12-month period sum shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - e. A monthly and annual material balance of VOC (in tons) from the coating booths. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. The consecutive 12-month period sum shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. It should be noted that t-butyl acetate is a VOC for purposes of all recordkeeping, emission reporting, photochemical dispersion modeling, and inventory requirements that apply to VOCs, and shall be uniquely identified in emission reports. However, t-butyl acetate is not a VOC for purposes of VOC emission standards, VOC emission limitations, or VOC content requirements.
 - f. Operation, maintenance, and replacement logs for the coating booth dry filters as required by Condition 22.
 - g. Scheduled and unscheduled maintenance and operator training.

- h. Records of visual observations of the spray booths, including corrective actions or Method 9 observations if opacity was observed.
- i. Results of all stack tests, visible emission evaluations, and performance evaluations.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110 and Condition 9 of 8/25/2011 Permit)

Testing

25. **Finishing - Emissions Testing** - The coating booths shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.

(9 VAC 5-80-110 and Condition 10 of 8/25/2011 Permit)

MACT Subpart JJ – Wood Furniture Manufacturing Operations

26. **MACT Subpart JJ** - The facility is to be operated in compliance with Federal requirements under 40 CFR Part 63 Subpart JJ, including future revisions. All terms used regarding 40 CFR 63 Subpart JJ shall have the meanings as defined in 40 CFR 63.801 and 40 CFR 63.2.

(9 VAC 5-60-100, 9 VAC 5-80-110 and 40 CFR 63 Subpart A, 40 CFR 63.800)

Emission Standard

27. **MACT Subpart JJ – Emission Standard** - Volatile Hazardous Air Pollutant (VHAP) emissions from the facility shall not exceed the following limits:

- a. For finishing operations use any of the following methods:
 - i. Achieve a weighted average VHAP content across all coatings of 1.0 lb VHAP/lb solids, as applied;
 - ii. Use compliant finishing materials that meet the following specifications:
 - (a) Each sealer and topcoat has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;
 - (b) Each stain has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;
 - (c) Each thinner contains no more than 10.0 percent VHAP by weight except where excluded by (e) of this sub-section;

- (d) Each washcoat, basecoat, and enamel that is purchased pre-made, that is, it is not formulated onsite by thinning another finishing material, has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;
 - (e) Each washcoat, basecoat, and enamel that is formulated onsite is formulated using a finishing material containing no more than 1.0 lb VHAP/lb solids and a thinner containing no more than 3.0 percent VHAP by weight.
- iii. Use any combination of averaging and compliant coatings such that no greater than 1.0 lb of VHAP being emitted per lb of solids used;
- b. For cleaning operations strippable spray booth coatings shall be used that contain no more than 0.8 lb VOC/lb solids, as applied.
- c. Compliant contact adhesives shall be used based on the following criteria:
 - i. For aerosol adhesives, as well as hot melt, PVA, and urea-formaldehyde adhesives, and for contact adhesives applied to nonporous substrates there is no limit on the VHAP content of these adhesives;
 - ii. For foam adhesives used in products that meet flammability requirements the VHAP content can be no more than 1.8 lb VHAP/lb solids, as applied;
 - iii. For all other contact adhesives the VHAP content can be no more than 1.0 lb VHAP/lb solids, as applied.
- d. By November 21, 2014 limit formaldehyde emissions in all Finishing Operations and Contact Adhesives by complying with the provisions specified in either of the following methods:
 - i. Limit total formaldehyde (F_{total}) use in coatings and contact adhesives to no more than 400 pounds per rolling 12 month period;
 - ii. Use coatings and contact adhesives only if they are low-formaldehyde coatings and contact adhesives, in any wood furniture manufacturing operations.

(9 VAC 5-60-100, 9 VAC 5-80-110 and 40 CFR 63.802)

Continuous Compliance

28. **MACT Subpart JJ – Continuous Compliance** – Continuous Compliance with the VHAP emissions limits shall be determined as follows (see Conditions 34 and 35 for content and timing of report submissions and signatory requirements):

- a. For finishing operations when averaging is being used to show continuous compliance, the permittee shall submit the results of the averaging calculation (Equation 1) for each month within that semiannual period and submitting a compliance certification with the semiannual report. The compliance certification shall state that the value of (E), as calculated by Equation 1, is no greater than 1.0. The facility is in violation of the standard if E is greater than 1.0 for any month. A violation of the monthly average is a separate violation of the standard for each day of operation during the month, unless the affected source can demonstrate through records that the violation of the monthly average can be attributed to a particular day or days during the period.

$$E = (M_{c1}C_{c1} + M_{c2}C_{c2} + * * * + M_{cn}C_{cn} + S_1W_1 + S_2W_2 + * * * S_nW_n) / (M_{c1} + M_{c2} + * * * + M_{cn}) \text{ Equation 1}$$

E = the emission limit achieved by an emission point or a set of emission points, in lb VHAP/lb solids.

M_c = the mass of solids in a finishing material or coating (c) used monthly, including exempt finishing materials and coatings, lb solids/month.

C_c = the VHAP content of a finishing material or coating (c), in pounds of VHAP per pound of coating solids.

S = the VHAP content of a solvent, expressed as a weight fraction, added to finishing materials or coatings.

W = the amount of solvent, in pounds, added to finishing materials and coatings during the monthly averaging period.

The Emission Limit (E in lb VHAP / lb solids) equals the sum, for all finishing materials and coatings, of the mass of solids in each material used within that month (M_c in lb solids / month) multiplied by the VHAP content in each material (C_c in lb VHAP / lb solids) plus the sum, for all solvents, of the mass of solvent used monthly (W in lb solvent / month) multiplied by the weight fraction of VHAP in the solvent (S in lb VHAP / lb solvent), with this total being divided by the sum, for all finishing materials and coatings, of the mass of solids in each finishing material and coating used within that month (M_c in lb solids / month).

- b. For finishing operations when compliant coatings are being used to show continuous compliance, the permittee shall use compliant coatings and thinners, maintain records that demonstrate the finishing materials and thinners are compliant, and submit a compliance certification with the semiannual report which states that compliant stains, washcoats, sealers, topcoats, basecoats, enamels, and thinners, as stated in Condition 27, have been used each day in the semiannual reporting period or should otherwise identify the periods of noncompliance and the reasons for noncompliance. The facility is in violation of the standard whenever a noncompliant coating, as demonstrated by records or by a sample of the coating, is used.
- c. For contact adhesive operations when compliant adhesives are being used to show compliance, the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall state that compliant contact and/or foam adhesives have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant contact and/or foam adhesives were used. Each day a noncompliant contact or foam adhesive is used is a single violation of the standard.
- d. For strippable spray booth coatings the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall state that compliant strippable spray booth coatings have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant materials were used. Each day a noncompliant strippable booth coating is used is a single violation of the standard.
- e. For work practice standards the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall state that the work practice implementation plan is being followed, or should otherwise identify the provisions of the plan that have not been implemented and each day the provisions were not implemented. During any period of time that the permittee is required to implement the provisions of the plan, each failure to implement an obligation under the plan during any particular day is a violation and the Administrator may require the permittee to modify the plan (see Condition 32.a).
- f. For formaldehyde emissions the permittee shall demonstrate compliance by one of the following methods:
 - i. Calculate total formaldehyde emissions from all finishing materials and contact adhesives used at the facility using Equation 5 and maintain a value of F_{total} no more than 400 pounds per rolling 12 month period.

Equation 5

$$F_{\text{total}} = (C_{f1}V_{c1} + C_{f2}V_{c2} + * * * + C_{fn}V_{cn} + G_{f1}V_{g1} + G_{f2}V_{g2} + * * * + G_{fn}V_{gn})$$

- ii. Use of coatings and contact adhesives only if they are low-formaldehyde coatings and adhesives maintaining a certified product data sheet for each coating and contact adhesive used as required by §63.806(b)(1), and submitting a compliance certification with the semiannual report required by §63.807(c). The compliance certification shall state that low-formaldehyde coatings and contact adhesives, as applicable, have been used each day in the semiannual reporting period or should otherwise identify the periods of noncompliance and the reasons for noncompliance. An affected source is in violation of the standard whenever a coating or contact adhesive that is not low-formaldehyde, as demonstrated by records or by a sample of the coating or contact adhesive, is used. Use of a noncompliant coating or contact adhesive is a separate violation for each day the noncompliant coating or contact adhesive is used.

(9 VAC 5-60-100, 9 VAC 5-80-110, 40 CFR 63.8 and 40 CFR 63.804(g) and (h))

Testing

29. **MACT Subpart JJ – Testing** - If compliance testing is conducted the tests shall be conducted using the test methods and procedures as specified in 40 CFR 63.805 of Subpart JJ.
(9 VAC 5-60-100, 9 VAC 5-80-110 and 40 CFR 63.805)

Submittals

30. **MACT Subpart JJ – Submittals** - All submittals regarding 40 CFR 63, Subpart JJ to the Administrator shall be sent to EPA Region III and the Blue Ridge Regional Office at the following addresses:

U.S. Environmental Protection Agency Region III
Air Protection Division (3AP00)
ATTN: Wood Furniture NESHAP Coordinator
1650 Arch Street
Philadelphia, PA 19103-2029

Virginia Department of Environmental Quality
Blue Ridge Regional Office
Attn: Air Compliance Manager
3019 Peters Creek Road
Roanoke, VA 24019

(9 VAC 5-60-100, 9 VAC 5-80-110 and 40 CFR 63.13)

Operation and Maintenance

31. **MACT Subpart JJ – Operations and Maintenance** - The permittee shall meet the following operation and maintenance requirements:

- a. At all times, including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain the facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards.
- b. Malfunctions shall be corrected as soon as practicable after their occurrence.
- c. Operation and maintenance requirements established pursuant to section 112 of the Clean Air Act are enforceable independent of emissions limitations or other requirements in relevant standards.
- d. Determination of whether operation and maintenance procedures are being used will be based on information available to the DEQ which may included, but is not limited to, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(9 VAC 5-60-100, 9 VAC 5-80-110 and 40 CFR 63.6(e))

Work Practice Standards

32. **MACT Subpart JJ – Work Practice Standards** - The permittee shall develop and implement the following work practice standards:

- a. Work practice implementation plan –
 - i. The permittee shall prepare and maintain a written work practice implementation plan that defines environmentally desirable work practices for the finishing and gluing operations and addresses each of the work practice standards presented in Conditions 32.b. through 32.l. that follows. The plan shall be developed no more than 60 days after the compliance date.
 - ii. The written work practice implementation plan shall be available for inspection by the Administrator upon request. If the Administrator determines that the work practice implementation plan does not include sufficient mechanisms for ensuring that the work practice standards are being implemented, the Administrator may require the permittee to modify the plan. Revisions or modifications to the plan do not require a revision of the source's Title V permit.

- iii. The inspection and maintenance plan required by Condition 32.c. and the formulation assessment plan for finishing operation required by Condition 32.l. are also reviewable by the Administrator.
- b. Operator training course – The permittee shall train all new and existing personnel, including contract personnel, who are involved in finishing, gluing, cleaning, and washoff operations, use of manufacturing equipment in these operations, or implementation of the requirements of 40 CFR Part 63 Subpart JJ. All new personnel shall be trained upon hiring. All existing personnel shall be trained within six months of the compliance date. All personnel shall be given refresher training annually. The permittee shall maintain a copy of the training program with the work practice implementation plan. The training program shall include, at a minimum, the following:
 - i. A list of all current personnel by name and job description that are required to be trained;
 - ii. An outline of the subjects to be covered in the initial and refresher training for each position or group of personnel;
 - iii. Lesson plans for courses to be given at the initial and the annual refresher training that include, at a minimum, appropriate application techniques, appropriate cleaning and washoff procedures, appropriate equipment setup and adjustment to minimize finishing material usage and overspray, and appropriate management of cleanup wastes, and
 - iv. A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion.
- c. Inspection and maintenance plan – The permittee shall prepare and maintain with the work practice implementation plan a written leak inspection and maintenance plan that specifies:
 - i. A minimum visual inspection frequency of once per month for all equipment used to transfer or apply coatings, adhesives, or organic HAP solvents;
 - ii. An inspection schedule;
 - iii. Methods for documenting the date and results for each inspection and any repairs that were made;
 - iv. The timeframe between identifying the leak and making the repair, which adheres, at a minimum, to the following schedule;

- (a) A first attempt at repair (e.g., tightening of packing glands) shall be made no later than five calendar days after the leak is detected; and
 - (b) Final repairs shall be made within 15 calendar days after the leak is detected, unless the leaking equipment is to be replaced by a new purchase, in which case repairs shall be completed with three months.
- d. Cleaning and washoff solvent accounting system – The permittee shall develop an organic HAP solvent accounting form to record:
 - i. The quantity and type of organic HAP solvent used each month for washoff and cleaning, as defined in 40 CFR 63.801;
 - ii. The number of pieces washed off, and the reason for the washoff; and
 - iii. The quantity of spent organic HAP solvent generated from each washoff and cleaning operation each month, and whether it is recycled onsite or disposed offsite.
- e. Chemical composition of cleaning and washoff solvents – The permittee shall not use cleaning or washoff solvents that contain any of the pollutants listed in Table 4 of 40 CFR Part 63 Subpart JJ, in concentrations subject to MSDS reporting as required by OSHA.
- f. Spray booth cleaning – The permittee shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, or plastic filters, unless the spray booth is being refurbished. If the spray booth is being refurbished, that is the spray booth coating or other protective material used to cover the booth is being replaced, the permittee shall use no more than 1.0 gallon of organic HAP solvent per booth to prepare the surface of the booth prior to applying the booth coating.
- g. Storage requirements – The permittee shall use normally closed containers for storing finishing, gluing, cleaning, and washoff materials.
- h. Application equipment requirements – As of November 21, 2014, each owner or operator shall not use conventional air spray guns except when all emissions from the finishing application station are routed to a functioning control device. Prior to November 21, 2014, the permittee may use conventional air spray guns to apply finishing materials only under any of the following circumstances:
 - i. To apply finishing materials that have a VOC content no greater than 1.0 lb VOC/lb solids, as applied;

- ii. For touchup and repair under the following conditions:
 - (a) The touchup and repair occurs after completion of the finishing operation;
or
 - (b) The touchup and repair occurs after the application of stain and before the application of any other type of finishing material, and materials used for touchup and repair are applied from a container that has a volume of no more than 2.0 gallons.
- iii. When spray is automated, that is, the spray gun is aimed and triggered automatically, not manually;
- iv. When emissions from the finishing application station are directed to a control device;
- v. The conventional air gun is used to apply finishing materials and the cumulative total usage of that finishing material is no more than 5.0 percent of the total gallons of finishing material used during that semiannual period; or
- vi. The conventional air gun is used to apply stain on a part for which it is technically or economically infeasible to use any other spray application technology. The permittee shall demonstrate technical or economic unfeasibility by submitting to the Administrator a videotape, a technical report, or other documentation that supports the permittee's claim of technical or economic unfeasibility. The following criteria shall be used, either independently or in combination, to support the permittee's claim of technical or economic unfeasibility:
 - (a) The production speed is too high or the part shape is too complex for one operator to coat the part and the application station is not large enough to accommodate an additional operator; or
 - (b) The excessively large vertical spray area of the part makes it difficult to avoid sagging or runs in the stain.
- i. Line cleaning – The permittee shall pump or drain all organic HAP solvent used for line cleaning into a normally closed container.
- j. Gun cleaning - The permittee shall collect all organic HAP solvent used to clean spray guns into a normally closed container.
- k. Washoff operations - The permittee shall control emissions from washoff operations by:

- i. Using normally closed tanks for washoff; and
 - ii. Minimizing dripping by tilting or rotating the part to drain as much solvent as possible.
1. Formulation assessment plan for finishing operations - The permittee shall prepare and maintain with the work practice implementation plan a formulation assessment plan that:
- i. Identifies VHAP from the list presented in Table 5 of 40 CFR Part 63 Subpart JJ that are being used in finishing operations;
 - ii. Establishes a baseline level of usage for each VHAP identified. The baseline usage level shall be the highest annual usage from 1994, 1995, or 1996, for each VHAP identified, except for formaldehyde and styrene which shall be determined as specified by 40 CFR 63.803 (1)(2).

For VHAPs that do not have a baseline, one will be established according to Condition (vi) below.
 - iii. Tracks the annual usage of each VHAP identified that is present in amounts subject to MSDS reporting as required by OSHA.
 - iv. If the annual usage of the VHAP identified exceeds its baseline level, then the permittee shall provide a written notification to the Blue Ridge Regional Office that describes the amount of the increase and explains the reasons for exceedance of the baseline level. The following explanations would relieve the owner or operator from further action, unless the affected source is not in compliance with any State regulations or requirements for that VHAP:
 - (a) The exceedance is no more than 15.0 percent above the baseline level;
 - (b) Usage of the VHAP is below the *de minimis* level presented in Table 5 of 40 CFR Part 63 Subpart JJ for that VHAP;
 - (c) The affected source is in compliance with its State's air toxic regulations or guidelines for the VHAP; or
 - (d) The source of the pollutant is a finishing material with a VOC content of no more than 1.0 lb VOC/lb solids, as applied.
 - v. If none of the explanations listed in Condition 32.1.iv are the reasons for the increase, the permittee shall confer with the Blue Ridge Regional Office, to discuss the reason for the increase and whether there are practical and reasonable technology-based solutions for reducing the usage. The evaluation of whether a

technology is reasonable and practical shall be based on cost, quality, and marketability of the product, whether the technology is being used successfully by other wood furniture manufacturing operations, or other criteria mutually agreed upon by the Blue Ridge Regional Office, and the owner or operator. If there are no practical and reasonable solutions, the facility need take no further action. If there are solutions, the owner or operator shall develop a plan to reduce the usage of the pollutant to the extent feasible. The plan shall address the approach to be used to reduce emissions, a timetable for implementing the plan, and a schedule for submitting notification of progress.

- vi. If the permittee uses a VHAP of potential concern listed in Table 6 of 40 CFR Part 63 Subpart JJ for which a baseline level has not been previously established, then the baseline level shall be established as the *de minimis* level provided in that same table for that chemical. The permittee shall track the annual usage of each VHAP of potential concern identified that is present in amounts subject to MSDS reporting as required by OSHA. If usage of the VHAP of potential concern exceeds the *de minimis* level listed in Table 6 of 40 CFR Part 63 Subpart JJ for that chemical, then the permittee shall provide an explanation to the Blue Ridge Regional Office that documents the reason for the exceedance of the *de minimis* level. If the explanation is not one of those listed in Condition 32.1.iv, the affected source shall follow the procedures established in Condition 32.1.v.

(9 VAC 5-60-100, 9 VAC 5-80-110 and 40 CFR 63.803(a-1))

Recordkeeping

- 33. **MACT Subpart JJ – Recordkeeping** - The permittee shall maintain records of the following:
 - a. For emission limit purposes, the permittee shall maintain the following:
 - i. A certified product data sheet for each finishing material, thinner, contact adhesive, and strippable spray booth coating subject to the emission limits in Condition 27,
 - ii. The VHAP content, in lb VHAP/lb solids, as applied, of each finishing material and contact adhesive subject to the emission limits in Conditions 27.a and 27.c; and
 - iii. The VOC content, in lb VOC/lb solids, as applied, of each strippable booth coating subject to the emission limits in Condition 27.b.
 - iv. The formaldehyde content, in lb/gal, as applied, of each finishing material and contact adhesive subject to the emission limits in Condition 27.d and chooses to comply with the 400 lb/yr limits on formaldehyde in Condition 27.d.

- b. Following the averaging method the permittee shall maintain copies of the averaging calculation for each month following the compliance date, as well as the data on the quantity of coatings and thinners used that is necessary to support the calculation of E in Equation 1 (as defined in Condition 28).
- c. The permittee shall maintain onsite the work practice implementation plan and all records associated with fulfilling the requirements of that plan, including, but not limited to:
 - i. Records demonstrating that the operator training program required by Condition 32.b is in place;
 - ii. Records collected in accordance with the inspection and maintenance plan required by Condition 32.c;
 - iii. Records associated with the cleaning solvent accounting system required by Condition 32.d;
 - iv. Records associated with the limitation on the use of conventional air spray guns showing total finishing material usage and the percentage of finishing materials applied with conventional air spray guns for each semiannual period required by Condition 32.h;
 - v. Records associated with the formulation assessment plan required by Condition 32.i; and
 - vi. Copies of documentation such as logs developed to demonstrate that the other provisions of the work practice implementation plan are followed.
- d. The permittee shall maintain records of the compliance certifications submitted for each semiannual period following the compliance date.
- e. The permittee shall maintain records of all other information submitted with the compliance status report and the semiannual reports.
- f. The permittee shall maintain files of all information (including all reports and notifications) required, recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be retained on site. The remaining three (3) years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

Notification of Compliance

34. **MACT Subpart JJ – Notification of Compliance** - Each time a notification of compliance status is required, the permittee shall submit to the Blue Ridge Regional Office and the Administrator, a notification of compliance status, signed by a responsible official of the company that owns or operates the facility who shall certify its accuracy, attesting to whether the source has complied with 40 CFR Part 63 Subpart JJ. The notification shall list:
- a. The methods that were used to determine compliance;
 - b. The results of any performance tests, opacity or visible emission observations, and/or other monitoring procedures or methods that were conducted;
 - c. The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;
 - d. The type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times and in accordance with the test methods specified;
 - e. An analysis demonstrating whether the facility is a major source or an area source (using the emissions generated for this notification);
 - f. A statement by the permittee as to whether the facility has complied with Subpart JJ as expressed in this permit.

(9 VAC 5-60-100, 9 VAC 5-80-110 and 40 CFR 63.9(h))

Reporting

35. **MACT Subpart JJ – Reporting** - Reporting not otherwise required by this permit shall consist of the following:
- a. The permittee when demonstrating continuous compliance shall submit a semi-annual report covering the previous six (6) months of wood furniture manufacturing operations:
 - i. The time periods to be addressed are the calendar months January through June and July through December. The reports shall be submitted no later than 30 calendar days after the end of each 6-month period.
 - ii. The semiannual reports shall include the information required by Condition 28, a statement of whether the facility was in compliance or noncompliance, and, if the

facility was in noncompliance, the measures taken to bring the facility into compliance.

- iii. The frequency of the reports required by Condition a. above shall not be reduced from semiannually regardless of the history of the owner's or operator's compliance status.
- b. The permittee, when required to provide a written notification by Condition 32.i.iv for exceedance of a baseline level, shall include in the notification one or more statements that explains the reasons for the usage increase. The notification shall be submitted no later than 30 calendar days after the end of the annual period in which the usage increase occurred.

Copies of reports shall be submitted to the U.S. Environmental Protection Agency and Virginia DEQ at the addresses given in Condition 30.
(9 VAC 5-60-100, 9 VAC 5-80-110 and 40 CFR 63.10(d) & 63.807)

Facility Wide Conditions

36. **Facility Wide Conditions - Testing** - The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
(9 VAC 5-50-30 and 9 VAC 5-80-110)

Insignificant Emission Units

37. **Insignificant Emission Units** - The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutants Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
ES224	Blow-Off Tack Booth	9 VAC 5-80-720 B	PM & PM-10	---
IA233	Back Wall Oven Booth Vent	9 VAC 5-80-720 B	PM, PM-10, SO ₂ , NO _x & VOC	---
NG-Insig	22 HVAC/Air Make-up units fired with natural gas	9 VAC 5-80-720 C	---	<10 MMBtu/hr each

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Permit Shield & Inapplicable Requirements

38. **Permit Shield & Inapplicable Requirements** - Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
None Identified		

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.

(9 VAC 5-80-140)

General Conditions

39. **General Conditions - Federal Enforceability** - All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9 VAC 5-80-110 N)
40. **General Conditions - Permit Expiration** - This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)
41. **General Conditions - Permit Expiration** - The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)
42. **General Conditions - Permit Expiration** - If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of

Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.

(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

43. **General Conditions - Permit Expiration** - No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)
44. **General Conditions - Permit Expiration** - If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)
45. **General Conditions - Permit Expiration** - The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)
46. **General Conditions - Recordkeeping and Reporting** - All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
- a. The date, place as defined in the permit, and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of such analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.
- (9 VAC 5-80-110 F)

47. **General Conditions - Recordkeeping and Reporting** - Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
(9 VAC 5-80-110 F)

48. **General Conditions -Recordkeeping and Reporting** - The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31; and
- b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:
 - i. Exceedance of emissions limitations or operational restrictions;
 - ii. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,
 - iii. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that “no deviations from permit requirements occurred during this semi-annual reporting period.”

(9 VAC 5-80-110 F)

49. **General Conditions – Recordkeeping** – The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record.

(9 VAC 5-80-110 and Condition 14 of the 8/25/2011 Permit)

50. **General Conditions - Annual Compliance Certification** - Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and

DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- a. The time period included in the certification. The time period to be addressed is January 1 to December 31;
- b. The identification of each term or condition of the permit that is the basis of the certification;
- c. The compliance status;
- d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance;
- e. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period;
- f. Such other facts as the permit may require to determine the compliance status of the source; and
- g. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

R3_APD_Permits@epa.gov

(9 VAC 5-80-110 K.5)

51. **General Conditions - Permit Deviation Reporting** - The permittee shall notify the Director, Blue Ridge Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to Condition 48 of this permit. (9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

52. **General Conditions - Failure/Malfunction Reporting** - In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Blue Ridge Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Blue Ridge Regional Office.
(9 VAC 5-20-180 C and Condition 15 of the 8/25/2011 Permit)
53. **General Conditions - Severability** - The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-110 G.1)
54. **General Conditions - Duty to Comply** - The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.
(9 VAC 5-80-110 G.2)
55. **General Conditions - Need to Halt or Reduce Activity not a Defense** - It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9 VAC 5-80-110 G.3)
56. **General Conditions - Permit Modification** - A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9 VAC 5-80-190 and 9 VAC 5-80-260)
57. **General Conditions - Property Rights** - The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-110 G.5)

58. **General Conditions - Duty to Submit Information** - The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9 VAC 5-80-110 G.6)
59. **General Conditions - Duty to Submit Information** - Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
(9 VAC 5-80-110 K.1)
60. **General Conditions - Duty to Pay Permit Fees** - The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)
61. **General Conditions - Fugitive Dust Emission Standards** - During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:
- a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
 - b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
 - c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;
 - d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,

- e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

- 62. **General Conditions - Startup, Shutdown, and Malfunction** - At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20 E and 9 VAC 5-40-20 E)

- 63. **General Conditions - Alternative Operating Scenarios** - Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.

(9 VAC 5-80-110 J)

- 64. **General Conditions - Inspection and Entry Requirements** - The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- d. Sample or monitor at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2 and Condition 12 of the 8/25/2011 Permit)

65. **General Conditions - Reopening For Cause** - The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F. The conditions for reopening a permit are as follows:
- a. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - b. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
 - c. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.
- (9 VAC 5-80-110 L)
66. **General Conditions - Permit Availability** - Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.
(9 VAC 5-80-150 E)
67. **General Conditions – Permit Copy** – The permittee shall keep a copy of the August 25, 2011 permit on the premises of the facility to which it applies.
(9 VAC 5-80-110 and Condition 18 of the 8/25/2011 Permit)
68. **General Conditions - Transfer of Permits** - No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-160)
69. **General Conditions - Transfer of Permits** - In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160 and Condition 17 of the 8/25/2011 Permit)
70. **General Conditions - Transfer of Permits** - In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source

name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

71. **General Conditions - Malfunction as an Affirmative Defense** - A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of Condition 72 are met.
(9 VAC 5-80-250)
72. **General Conditions - Malfunction as an Affirmative Defense** - The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
- a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
 - d. The permittee notified the Board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
- (9 VAC 5-80-250)
73. **General Conditions - Malfunction as an Affirmative Defense** - In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
(9 VAC 5-80-250)
74. **General Conditions - Malfunction as an Affirmative Defense** - The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.
(9 VAC 5-80-250)

75. **General Conditions - Permit Revocation or Termination for Cause** - A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.
(9 VAC 5-80-190 C, 9 VAC 5-80-260 and Condition 11 of the 8/25/2011 Permit)
76. **General Conditions – Violation of Ambient Air Quality Standard** – The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.
(9 VAC 5-80-110 and Condition 16 of the 8/25/2011 Permit)
77. **General Conditions - Duty to Supplement or Correct Application** - Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9 VAC 5-80-80 E)
78. **General Conditions - Stratospheric Ozone Protection** - If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(40 CFR Part 82, Subparts A-F)
79. **General Conditions - Asbestos Requirements** - The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).
(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)
80. **General Conditions - Accidental Release Prevention** - If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)
81. **General Conditions - Changes to Permits for Emissions Trading** - No permit revision shall be required under any federally approved economic incentives, marketable permits,

emissions trading and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-110 I)

82. **General Conditions - Emissions Trading** - Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

- a. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
- b. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- c. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)